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CULTURAL RESOURCES INVESTIGATIONS

...RK LAKE,

SUBMITTED TO

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

A cultural resources reconnaissance was conducted within eight separate parcels of Federal land totaling 320 acres in the vicinity of Norfork Lake, Arkansas and Missouri. This investigation resulted in the discovery of eight previously unrecorded archeological sites. All sites contained prehistoric components; one site also contained an historic period component. All sites had been heavily impacted by 20th century land management practices and no intact deposits were encountered. No additional investigations were recommended.

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ARCHEOLOGICAL ASSESSMENTS REPORT NO. 58

Cultural Resources Investigations at Norfork Lake, Arkansas and Missouri

by

Aubra Lane Lee

Report Submitted
to the
US Army Engineer District, Little Rock

Contract Number
DACW03-86-D-0068
Order No. 0002

1986

ABSTRACT

A cultural resources reconnaissance was conducted within 8 separate parcels of federal land totaling 320 acres in the vicinity of Norfork Lake, Arkansas-Missouri. This investigation resulted in the discovery of 8 previously unrecorded archeological sites. All sites contained prehistoric components; 1 site also contained an historic period component. All sites had been heavily impacted by 20th Century land management practices and no intact deposits were encountered. No additional investigations were recommended.

Table of Contents

Cultural Resources Investigations at Norfork Lake,
Arkansas and Missouri

INTRODUCTION

Project Authorization

The investigations described below were conducted under the authority of and in compliance with the National Historic Preservation Act of 1980 (Public Law 96-515). In order to fulfill its responsibilities under this regulation, the U.S. Army Engineer District, Little Rock contracted with Archeological Assessments, Inc. to complete a reconnaissance level cultural resources survey of selected portions of Norfork Lake, Arkansas and Missouri. The work was authorized under Contract No. DACW 03-86-D-0068, Order Number 0002.

Project Area Location

The parcels inspected for possible cultural resources are located in federally owned lands near Norfork Lake in north-central Arkansas and south-central Missouri. The area surveyed consisted of 8 discontinuous parcels that totaled 320 acres. These tracts constitute the project area with Norfork Lake comprising the more inclusive study area (Figure 1).

Goals and Orientation

This cultural resources survey was conducted in a traditional manner. The immediate goals of this effort were to locate, describe, and identify previously unrecorded archeological sites in the project area. From these data, the relative regional significance of each site was assessed. These assessments guided subsequent recommendations on whether these sites were to receive additional archeological investigations.

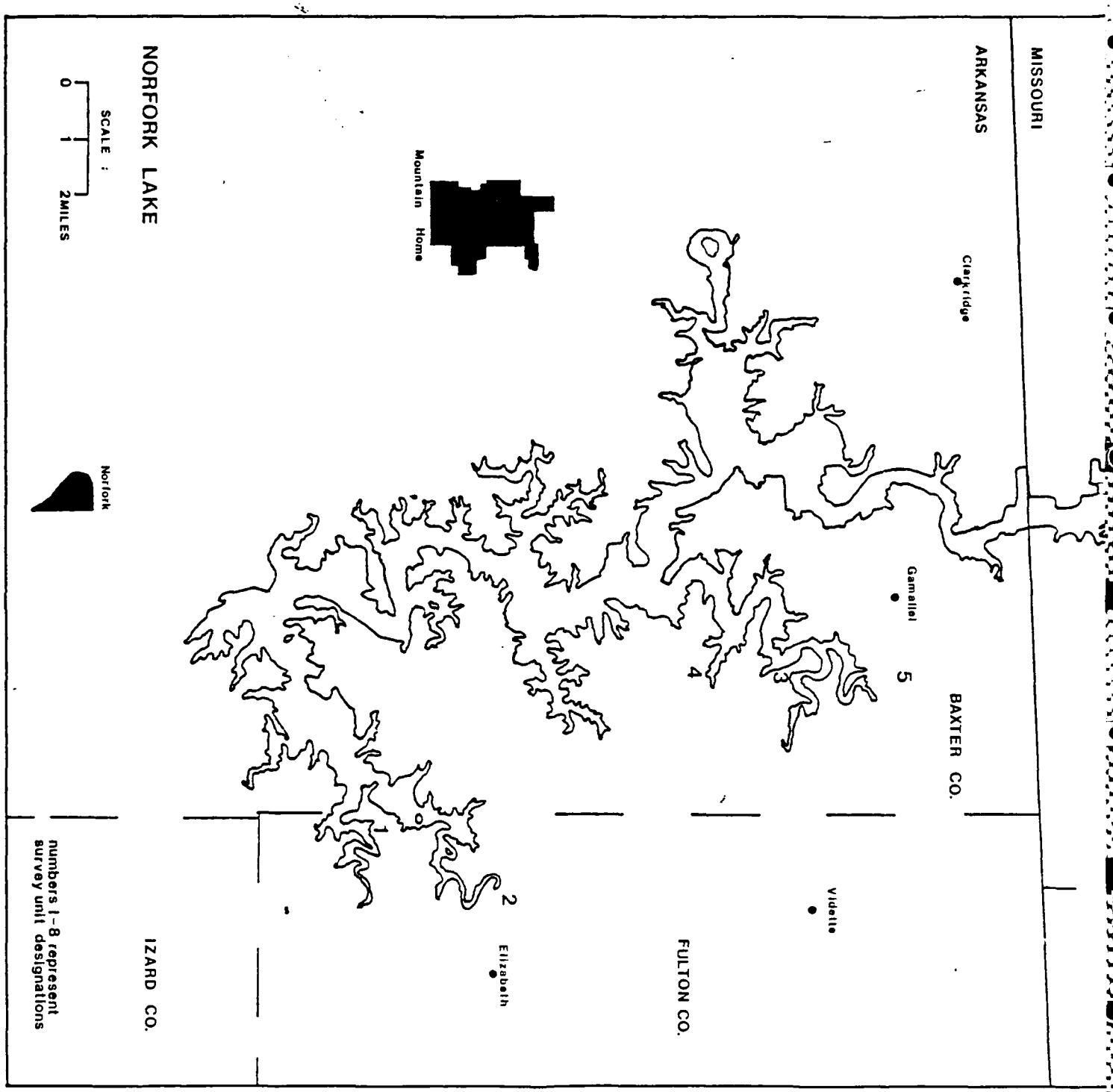
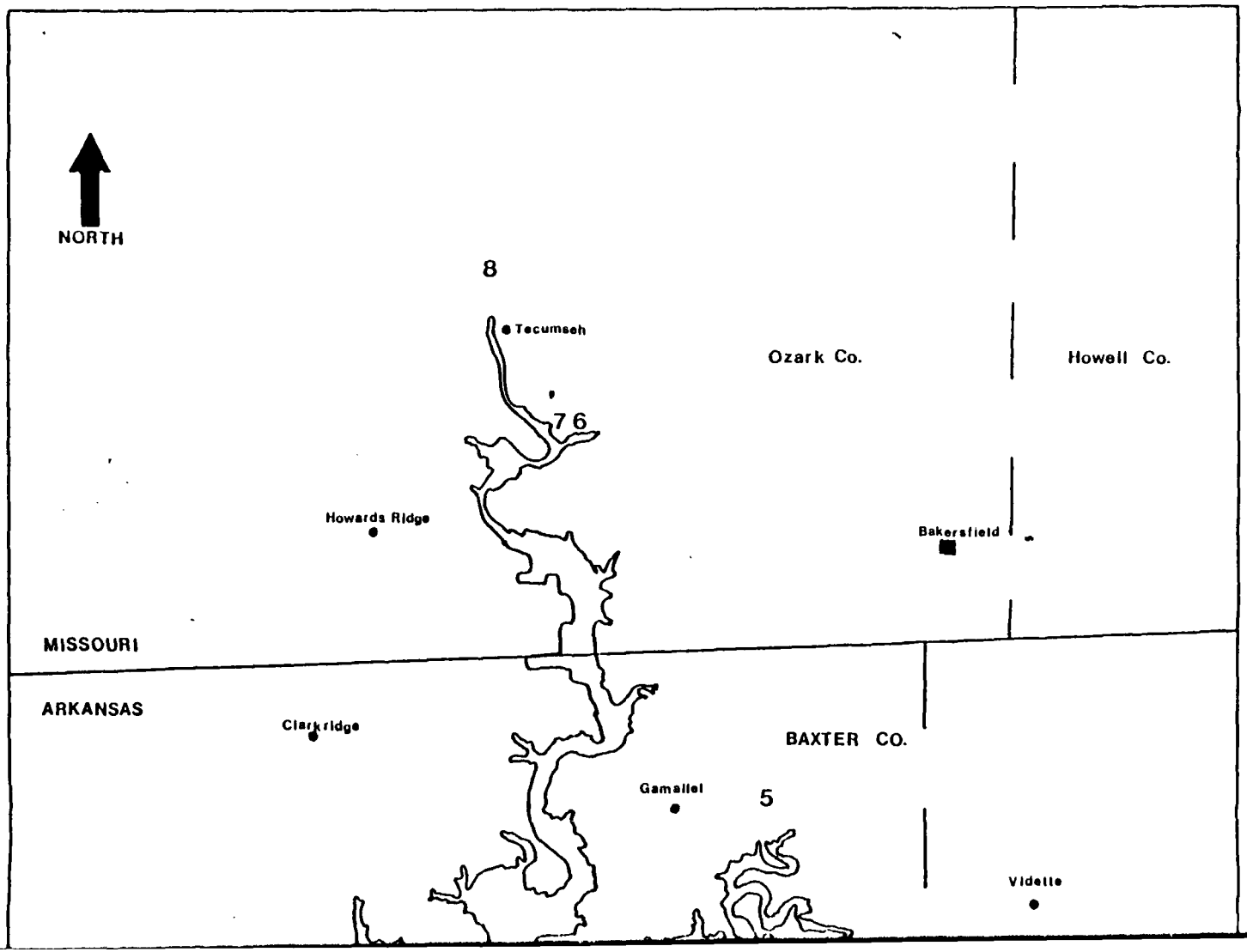


Figure 1. General Location Map of Project Area and Survey Units.



-rea and Survey Units.

SUMMARY OF INVESTIGATIONS

Several phases of work were completed during this project. These included a records check and literature review, an intensive pedestrian survey, and laboratory identification of recovered materials.

Background and Literature Research

The investigations began with a review of records containing previously recorded sites within the project area. The Office of the Arkansas State Archeologist and the Arkansas Historic Preservation Program reported that their files contained no sites on record for the project area. A search of the files of the Office of Historic Preservation, Missouri Department of Natural Resources was undertaken by John Northrip with negative results.

A literature review was conducted by Aubra L. Lee to synthesize extant data from previous archeological investigations within the study area. The previous investigations documented the existence of a large number of previously recorded sites located in or near Norfork Lake. These sites were located on landforms that range from stream floodplains to ridge crests and represented cultures beginning in the Paleo-Indian Period and ending in the recent Historic Period. Post-inundation impacts appear most severe on sites located in stream floodplain and terrace locales.

Pedestrian Survey

This survey, in general, consisted of pedestrian transects of varying widths within the 8 parcels. The shovel test interval corresponded to the transect width. Descriptive data, such as site setting, nature of the deposit, and artifact types recovered, were recorded for each site located.

The survey was conducted from June 3, 1986, to June 7, 1986. Aubra L. Lee served as field supervisor with field assistance provided by John D. Northrip and David Jarecke. The 8 parcels were assigned individual survey unit numbers. The exact locations of these units are marked on 7.5 minute quadrangle sheets and data describing the units and the way in which they were examined are presented on individual survey unit forms included with this report.

The methods applied to the areas consisted of parallel transects using 25 and 50 meter intervals between transects. Shovel testing was also conducted at 25 or 50 meter intervals with the tests measuring 30 centimeters in diameter with a maximum depth of 50cm below ground surface. The soil from these tests was troweled to recover cultural material(s). Access to the survey units was accomplished by using road transportation or in one case, a powerline right-of-way.

If a site was encountered, surface or subsurface, the shovel test interval was reduced to 10 meters to determine the horizontal and vertical limits of each site. A select surface collection and a 100% collection from all subsurface tests were obtained if possible. Artifacts were given proveniences that included survey unit number, surface or subsurface, and shovel test number. Site limits and locations of all shovel tests were plotted upon site maps. Site forms from the respective states have been completed and are on file at the US Army Engineer District, Little Rock, the Office of the State Archeologist, Fayetteville, Arkansas, and the Archaeological Survey of Missouri, Columbia, Missouri. A summary description of all sites located accompanies this report.

Laboratory Analysis

The recovered materials were processed under the direction of Anne Frances Gettys. All artifacts were grouped into prehistoric or historic categories. Prehistoric lithic artifacts were sorted into artifacts, flakes, and debris. Historic Period artifacts were identified as to raw material class, described, and an attempt was made to establish the cultural affiliation for chronologically diagnostic artifacts.

Particular emphasis was placed on the identification of the lithic raw materials used in the manufacture of prehistoric stone tools. Cotter Dolomite is a dominant formation in the Norfork Lake area (Padgett 1979: 2) and chert from this formation was identified in most collections. Cotter chert and chert from its lateral equivalent, the Jefferson City formation of Missouri, is banded or mottled in combinations of blue, gray, white, and tan.

A few artifacts were recovered which resemble Reeds Spring chert as identified in the Table Rock Lake area (Ray and Bennett 1986). These may represent imported artifacts, although some Reeds Spring chert may be available locally in stream gravels (Jack Ray, Personal communication).

Other lithic types represented in the Norfork Lake collections include quartzite, sandstone, and unidentified cherts.

The inferences offered regarding activities conducted at various sites come from Ms. Gettys detailed analysis of the artifact collections. These are given, along with a summary site description, in Appendix II.

Data Analysis

Data related to site characteristics were placed into a computerized data base management system (dBase II). These data included site number (state and field), quadrangle sheet location, landform type, cultural affiliation, nature of the deposits, areal extent, depth, and site condition. This systemic approach was used to generate the tables presented below discussing chronological assignations, site distribution, and site evaluation.

THE ARCHEOLOGICAL CONTEXT

Previous Archeological Investigations

Norfork Lake is located in the Interior Highland Physiographic province in Baxter and Fulton Counties, Arkansas, and Ozark County, Missouri. The lake is totally contained on the Salem Plateau which is a subdivision of the Ozark Plateaus province. Elevations range from 370 to 1200 feet above mean sea level (AMSL) and resulted from a mature dissection pattern evident on the Salem Plateau. This dessication has stripped away the younger strata to expose the Ordovician Aged Cotter Dolomite formation (Stroud et al 1969). The present vegetation within the study area has been described by Shelford (1963) as an upland Oak-Hickory forest with Pine and Cedar as sub-dominant species. This forest biome is somewhat different than the Prairie and Oak Savannah environments hypothesized for the Mid-Holocene Interval by Delcourt and Delcourt (1981). This interpretation of the regional paleo-ecology is similar to the environment proposed by John House (1968) which was a grassland with interspersed cedar and linear areas of hardwoods.

Investigations within the regional parameters of Norfork Lake began in 1903 and are ongoing at the present date. These investigations were conducted by professional and avocational archeologists who have recovered and described a rather large data base that spans 12,000 years. The first of these investigations was completed by Charles Peabody (1903) who visited cave and rock shelters in Arkansas and Missouri. This visit was followed by excavations by Mark Harrington (1924, 1960) in several bluff shelters. Vegetal remains from the shelters have been analyzed by Gilmore (1930). Charles Cleland (1960, 1965) analyzed the faunal remains and Sandra Scholtz (1975) studied the textiles. These studies have provided base line data on several aspects of prehistoric material culture for the region.

The river basin salvage projects of the 1950's and 1960's and later cultural resources surveys (1970's and 1980's) lead to investigations within 3 impoundment areas of the White River. Surveys were completed for Beaver Lake (Scholtz 1967; Bennett and Stewart-Abernathy 1981; Bennett and Swanda 1985), Bull Shoals Lake (Howard 1951; Novick and Cantley 1979; Lee 1986), and Table Rock Lake (Chapman 1956, 1960; Howard 1956; Ray and Bennett 1986). Excavations in several areas of the region have been completed by Bray (1956), Dickson (1970), and Wood (1963). The excavation of a bluff shelter to the south of the project area has provided the basic framework for the Archaic chronology used in northwest Arkansas (Bartlett 1963).

Archeological investigations in the Norfork Lake environs consist of surveys and excavations. Excavations have been conducted by Davis (1961, 1964), House, Shiras and Knight (1969), Shiras and Shiras (1961), Shoemaker and Shoemaker (1961), and Tong (1951). Surveys in the area were completed by House and Smith (1973a, 1973b) and Klinger (1975). The most recent investigation of Norfork Lake was conducted by Thomas Padgett (1979) of the

Arkansas Archeological Survey. This study was a survey of 10% of the lake shoreline. Padgett located 28 sites and used this data coupled with previously recorded data to construct a model of prehistoric settlement patterns for Norfork Lake. The model categorizes sites into base camp/village and specialized activity sites. He hypothesizes that primary occupation areas cluster on lower terraces and stream floodplains with the upland utilized for specialized extractive strategies. Six sites (3BA16, 3BA11, 3BA12, 23OZ62, 23OZ64, and 23OZ65) were recommended for additional testing to determine their eligibility for the National Register of Historic Places.

Culture-Historical Framework

The culture period synopses presented below were extrapolated from Chapman (1975, 1980), Padgett (1979), and Perttula (1983). From this, it is hoped that a fairly concise view of the Paleo-Indian, Dalton, Archaic, Woodland, and Mississippian cultures will be presented. The period descriptions will focus on societal level, economy, and artifact assemblages.

Paleo-Indian (12,000-8,000 B.C.). This period is thought to represent a band level society based on a highly nomadic hunting tradition. These hunters followed the migrating herds of late Pleistocene megafauna inhabiting North America. Point types associated with this group are Clovis and Cumberland Fluted. Associated with these points are snub-ended scrapers, side scrapers, knives, drills, groovers, graving tools, abraders, and grinding stones.

Dalton (8,000-7,000 B.C.). The period is now thought to be a transitional state between the earlier Paleo-Indian and later Archaic cultures. They continued the nomadic, band level society, but, they hunted the new, smaller Holocene fauna. In addition, an expanded tool complex seems to indicate foraging for floral species. The Dalton point is considered highly diagnostic of this period. Other point types associated with the Dalton point are the Graham Cave Fluted and Plano-like projectile points. Additional artifacts associated with these points are: adzes, spokeshaves, steep-edged scraping and cutting tools, bone needles and awls, snub-ended scrapers, mortars, manos, and grinding slabs.

Archaic (7,000-1,000 B.C.). The Archaic Period represents a gradual shift to a semi-nomadic hunting and gathering tradition with an intensification of regional exploitation of ecozones. During this period, point style proliferation and variation is interpreted as a regionalization of band level society. New additions to the tool complexes such as adzes, bannerstones, fishhooks, and gorgets seem to support this hypothesis. The period may be broken into a three-part series: early, middle, and late.

Diagnostic types of the Early Archaic are the Rice Variants, Agate Basin, Graham Cave Notched, Hidden Valley, and Nebo Hill. Diagnostics of the Middle Archaic are the Big Sandy Notched, Table Rock Stemmed, Smith Basal Notched, and Jakie Stemmed, in addition to ground and chipped stone axes. The Late Archaic projectile point assemblage is exemplified by Etley Stemmed, Sedalia Lanceolate, Table Rock Stemmed, Smith Basal Notched, Stone Square Stemmed along with Clear Fork Gouges and Sedalia Diggers.

Woodland (1,000 B.C.- A.D. 900). This period represents a hypothesized population increase based on semi-sedentary horticulture. This horticulture was based upon the gathering of and/or nurturing of Sumpweed, Sunflower, and Chenopodium among others. This economic base allowed for increased trade and regional interaction. Pottery and the bow and arrow were introduced during this time frame. Pottery was plain or decorated with a style range from cord-marked to dentate stamped. Increased ceremonialism is evident in the occurrence of burial mounds, specialized artifact classes, and personal adornment. Projectile points are large, corner and side notched, convex based, and contracting stemmed styles. Full-grooved axes make their appearance in this period.

Mississippian (A.D. 900-1,700). This period represents a chiefdom level society based on maize agriculture. There is an increase and stratification of the population. Specialized classes and unequal wealth distribution are hallmarks of the society(s). Ceremonial mound centers were constructed and inhabited by a priestly order with support villages scattered about the landscape. Also, specialized extraction camps, exotic trade, and discrete activity areas are noted. Shell was introduced as a tempering agent for an elaborate ceramic complex along with an increase in personal adornment items. A rather incomplete tool complex for this area was described by Crumpler (1969:19) as containing bone tools, slate ear spools, ground stone axes, shell beads, and drills.

Historic Period. The Ozark region has been occupied since the period of initial contact between local aboriginal populations and European explorers (A.D. 1500-1825). After control of this area passed to the United States, wave after wave of Anglo-American settlers came in and through the area. The population increased with the settlers depending on farming (plantation, tenant, and marginal upland), logging, and mining for their livelihoods. This expansion period is characterized by rapid population growth centers in corridors paralleling different transportation modes (riverine and railroad) and later decline and abandonment (A.D. 1825-1930). Most of the area near the project area was not densely populated until after the turn of the 20th century. Historical sites projected to be located in this study area are farmsteads, and logging and mining camps (Stewart-Abernathy and Watkins 1982).

RESULTS OF FIELD WORK

Areas Examined

The 320 acres examined during the effort were divided into 8 separate survey units; each consisting of a separate parcel proposed for exchange. Observations made during the field investigations of these Survey Units are included with this report as Appendix I.

Table 1. Parcel Locations

Parcel Number	Legal Location	Survey Unit
3	sw/ne Sec 22 T19N, R11W	1
4	e1/2, sw Sec 1 n1/2, n1/2, ne/nw Sec 12 T19N, R11W	2
5	s1/2, s1/2, nw/nw Sec 7 T20N, R11W	3
6	se/sw Sec 18 T20N, R11W	4
7	ne/ne Sec 25 T21N, R12W s1/2, s1/2, se/sw Sec 19 ne Sec 30 T21N, R11W	5
8	ne/nw/nw/ne Sec 26 T22N, R12W	6
9	n1/2, ne Sec 27 T22N, R12W	7
10	ne/ne/nw, n1/2, nw/ne Sec 9 T22N, R12W	8

Survey Unit 5 (Parcel 7), Survey Unit 7 (Parcel 9), and Survey Unit 8 (Parcel 10) contained no sites. Survey Unit 1 (Parcel 3) contained 1 site. Survey Unit 2 (Parcel 4) contained 4 sites while Survey Units 3 (Parcel 5), 4 (Parcel 6), and 6 (Parcel 8) contained 1 site respectively.

Sites Recorded

A total of 8 previously unrecorded sites were located during the field investigation. A total of 7 sites contained only prehistoric artifacts. One site contained prehistoric and historic period artifacts. Table 2 contains a short synopsis of each site. The parcel number within which the site was found is given in parentheses after the site number. Full site descriptions are given on the appropriate Arkansas and Missouri Archeological Survey site forms which have been filed with the respective agency and are included with this report. An outline summary of each site's physical characteristics and a description of the recovered materials is given in Appendix II.

Table 2. Site Descriptions

Site Number	Descriptions and Recommendations
3FU39 (3)	Low density surface scatter consisting of point fragment, biface and flakes located on eroded backslope. Lithic tool manufacture from outcrop source(s) is inferred for this site from the presence of a weathered cortex on a recovered flake. The reworking of broken stone tools was observed on 3 artifacts and the use of tools for scraping and possibly other purposes is inferred from the presence of a modified flake along with reworked tool edges with high angles. A Late Archaic or Woodland cultural affiliation is indicated by a Langtry Stemmed Point (Chapman 1980: 309). No further investigations are recommended for this site.
3FU40 (4)	Very low density surface lithic scatter consisting of flaked chunks located on eroded backslope. Materials from this site indicate that a considerable amount of stone tool manufacture took place at the site, most likely centering on the production of bifaces. Possible core-flake production is recognized, perhaps using a bipolar technique suggested by a flake with a damaged end opposite its platform.

Table 2. Site Descriptions (cont'd)

Site Number	Descriptions and Recommendations
3FU40 (cont'd)	Several flakes and worked pieces retained a weathered cortex. Worn platforms, both facetted and unfacetted, are common. This could indicate resharpening of bifacial and possibly unifacial tools, or grinding of platforms during tool manufacture. It is also likely that there was tool manufacture at this site using previously deposited materials. This is indicated by possible arrow point preforms made from thinning flakes, fresher scars on the edge of a quartzite biface fragment, and the co-occurrence of an Early Archaic style point fragment and arrow point preforms. The presence of modified flakes, use damage on biface edges, and steep angle on damaged edges of modified flakes and tools suggest tool use on the site, including the use of scrapers. It is thought likely that this was a lithic procurement and workshop site. A Dalton cultural affiliation is indicated for this site by a possible Meserve Point (Bell 1958:52). No further investigations are recommended for this site.
3FU41 (4)	Moderate density lithic surface scatter consisting of points, bifaces, and various types of flakes. Located in eroded floodplain with spring nearby. Debris from stone tool manufacture, including biface production, was common at this site. Raw materials used included both outcrop and stream gravel material. Biface thinning and unidentified thinning flakes were recovered along with a bipolar flake and possible core. Resharpening flakes indicated tool maintenance and the presence of a reworked contracting stemmed point suggested tool re-use at the site. Other evidence for tool use included modified flakes, edge modification on flaked and unflaked pieces, and a biface tip thought to have been broken during use. No chronologically diagnostic lithic artifacts were recovered from this site. No further investigations are recommended for this site.

Table 2. Site Descriptions (cont'd)

Site Number	Descriptions and Recommendations
3FU42 (4)	Very low density surface/subsurface lithic scatter located on eroded bench. Recovered 1 point from surface and flakes from subsurface. No intact subsurface deposits. Debris from stone tool manufacture, including biface manufacture, was recovered from the site including chert from an outcrop source and quartzite from an unknown source. Weathered cortex was noted on both flakes and worked pieces. The recovered materials included tool production failures and thinning flakes. The possible heat treatment of chert is suggested by heat fracture on a Gary point before or during flaking and a break influenced by heat fracture on an uncompleted biface fragment was noted. The presence of a discarded and reused Gary point suggests tool replacement at the site. Tool use is indicated by edge modification on flakes, unflaked chunks, and broken tool preforms. A deliberately formed projection on a broken Gary point with scalar damage and rounding is interpreted as a scraper and/or graver. A Late Archaic or Woodland cultural affiliation is indicated by a Gary Stemmed Point (Chapman 1980:308). No further investigations are recommended for this site.
3FU43 (4)	Low density surface lithic scatter on eroded crest of interfluvial projection. Stone tool manufacture from outcrop material is indicated by weathered cortex on both flakes and worked pieces. Flake production from a core, possibly using a bipolar technique, is suggested by the presence of a core with edge damage opposite the final platform. Heat fracture during flaking was observed on 1 artifact perhaps indicating heat treatment of chert. Tool resharpening is indicated by the presence of a bifacial scraper resharpening flake. Edge modification on flakes including steep unifacial damage suggests tool use in scraping and other activities. No chronologically diagnostic lithic artifacts were recovered from this site. No further investigations are recommended for this site.

Table 2. Site Descriptions (cont'd)

Site Number	Descriptions and Recommendations
3BA152 (5)	Low density surface lithic scatter on eroded slope. Stone tool manufacture is evidenced by weathered cortex on one flake and the presence of thinning flakes. Weathered cortex indicates use of outcrop material. A possible bipolar flake was also observed. Tool use is indicated by the presence of modified flakes and a knife or dart point fragment which was broken during use. No chronologically diagnostic lithic artifacts were recovered from this site. No further investigations are recommended for this site.
3BA153 (6)	Heavy density surface lithic scatter on severely eroded backslope. A considerable number of items indicating lithic reduction, including biface production, from an outcrop source were recovered from this site. Weathered cortex was observed on both flakes and objective pieces. Other elements of manufacturing debris included bifaces broken during manufacture, a hammerstone and/or core, and thinning flakes. Four flakes show a type of modification (removal of platform by small flakes on both dorsal and ventral faces) that is inferred to be deliberate tool production using flakes (rather than incidental edge modification that could result from use). The use of tools at the site was indicated by flakes with edge modification, a flake scraper, a scraper made on a broken biface, and scraper resharpening flakes. No chronologically diagnostic lithic artifacts were recovered from this site. No further investigations are recommended for this site.
23OZ114 (8)	Low density historic/prehistoric subsurface deposit located on eroded slope. A single, broken dart point (Steuben Expanding Stemmed Point) was recovered from the site and indicates a Middle or Late Woodland cultural affiliation (Chapman 1980:313).

Table 2. Site Descriptions (cont'd)

Site Number	Descriptions and Recommendations
23OZ114 (cont'd)	The Historic Period debris suggested a residence or dump associated with a nearby residence. The recovery of a screw top glass jar fragment indicates a post-1924 occupation of this site (Wallis 1979:63). No further investigations are recommended for this site.

RECOMMENDATIONS

The cultural resources survey conducted in 8 Survey Units in the vicinity of Norfork Lake resulted in the location of 8 previously unrecorded sites. These sites have a chronological range beginning in the Archaic Period and ending with the Historic Period.

Survey Unit Evaluation

A total of 8 Survey Units were examined at the reconnaissance level as described above. Survey Unit 5 (Parcel 7), Survey Unit 7 (Parcel 9), and Survey Unit 8 (Parcel 10) contained no sites. Survey Unit 1 (Parcel 3), Survey Unit 3 (Parcel 5), Survey Unit 4 (Parcel 6), and Survey Unit 6 (Parcel 8) contained 1 site each. Survey Unit 2 (Parcel 4) contained 4 sites.

It is recommended that no further site location activities be conducted within these areas.

Site Evaluation

Of the 8 sites recorded for these parcels none were judged to contain intact deposits. All had been substantially modified by 20th Century land management practices. It is our judgment that further work at these sites will not result in the recovery of further significant scientific or cultural data. Therefore, no further archeological investigations are recommended for these sites.

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APPENDIX I

SURVEY UNIT FORMS

Survey Unit: 1 (Parcel 3)

Quad Sheet: Norfork Dam north, ARK., 1981, 7.5'

Terrain: ranges from undulating to very steep on the backslopes. Several ephemeral side slope drainages cut the landscape. Unit is approximately 300 meters north of lake (South Brushy Creek).

Vegetation: cedar and mixed hardwood upperstory with interspersed glade areas. Understory consists of small trees, shrubs, vines, and briars.

Soil Description(s): Soil Profile 1: 0-4cm, humus; 4-10cm, brown silt loam w/gravel; 10-15cm, yellow red clay w/gravel. Soil Profile 2: 0-5cm, silt loam w/gravel and sand; 5-10cm , bedrock.

Sites Recorded: 3FU39

Isolated Finds: 0

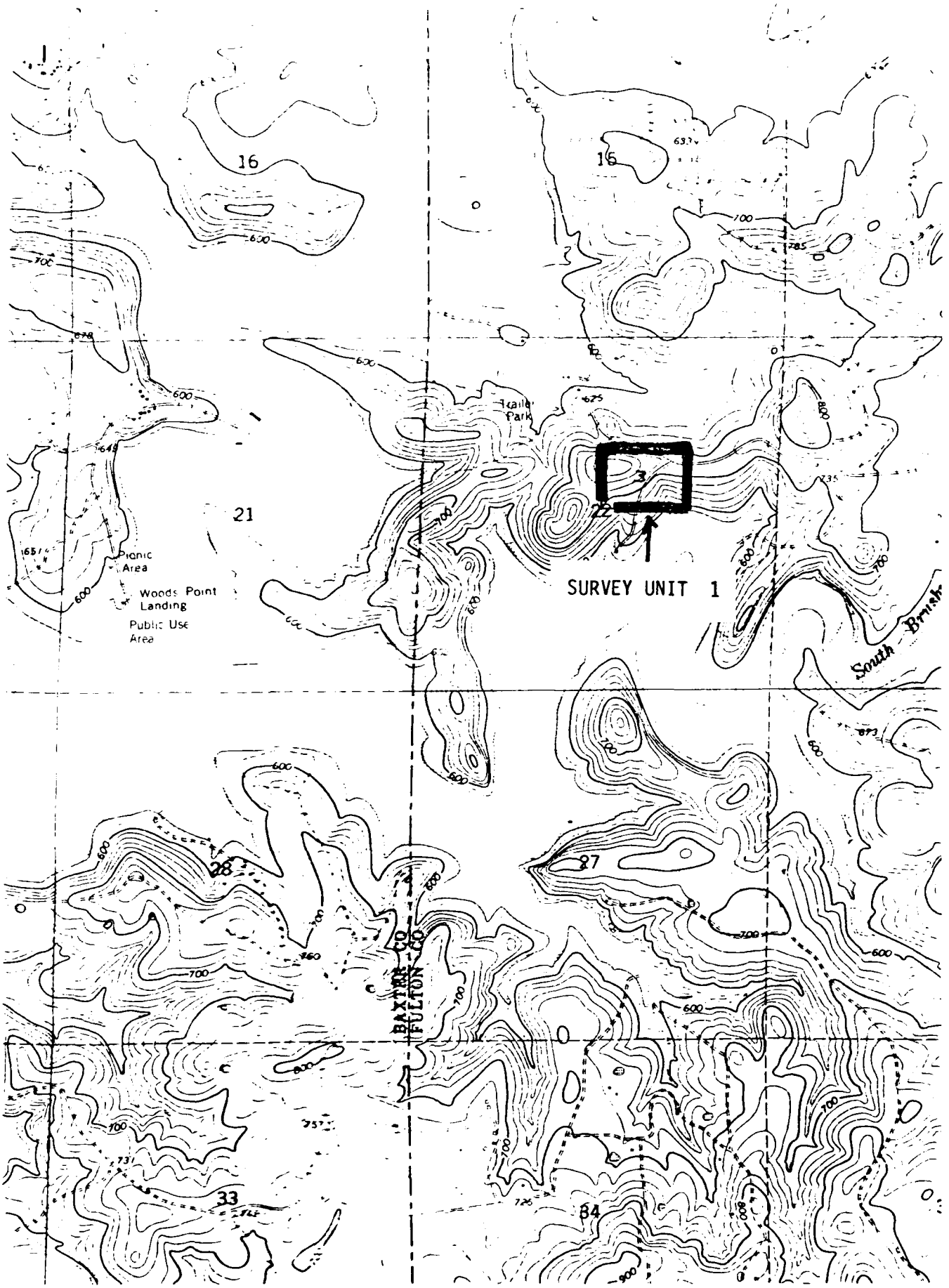
General Visibility: poor to fair due to differential ground cover.

Special Hinderances to Site Location: heavy ground cover in some areas, slope erosion, and road construction and usage.

Special Observations: backslopes are severely eroded exposing bedrock. Surface stone ubiquitous in survey unit. Several openings or "glade" areas observed in unit.

Survey Strategy: parallel transects with 50 meters interval between surveyors. Shovel test interval of 50 meters. In eroded areas, ground cover removed every 50 meters.

Surveyor(s): Lee, Northrip and Jarecke Date: 6/4/86


16
16
21
22
3
Trailer Park
Picnic Area
Woods Point Landing
Public Use Area
SURVEY UNIT 1
South Branch
28
27
33
34
BAXTER CO
FULTON CO

Survey Unit: 2 (Parcel 4)

Quad Sheet: Elizabeth, ARK., 1966, 7.5'

Terrain: consists of two interfluvial projects and their backslopes. Several intermittent drainages and 1 spring observed in unit. Crests of projections are rolling to slightly steep and backslopes are very steep.

Vegetation: consists of mixed hardwoods and cedar. Understory density varies and consists of small trees, shrubs, vines, briars, poison oak and ivy.

Soil Description(s): Soil Profile 1: 0-17cm, brown sandy loam; 17-30cm, light brown sandy loam; 30-47cm, red clay. Soil Profile 2: 0-6cm, humus; 6-13cm, silt loam w/gravel; 13-25cm, clay with gravel. Soil Profile 3: 0-4cm, sandy clay loam w/gravel; 4-17cm, red clay. Soil Profile 4: 0-4cm, silt with sand and gravel; 4- , bedrock.

Sites Recorded: 3FU40, 3FU41, 3FU42 and 3FU43

Isolated Finds: 0

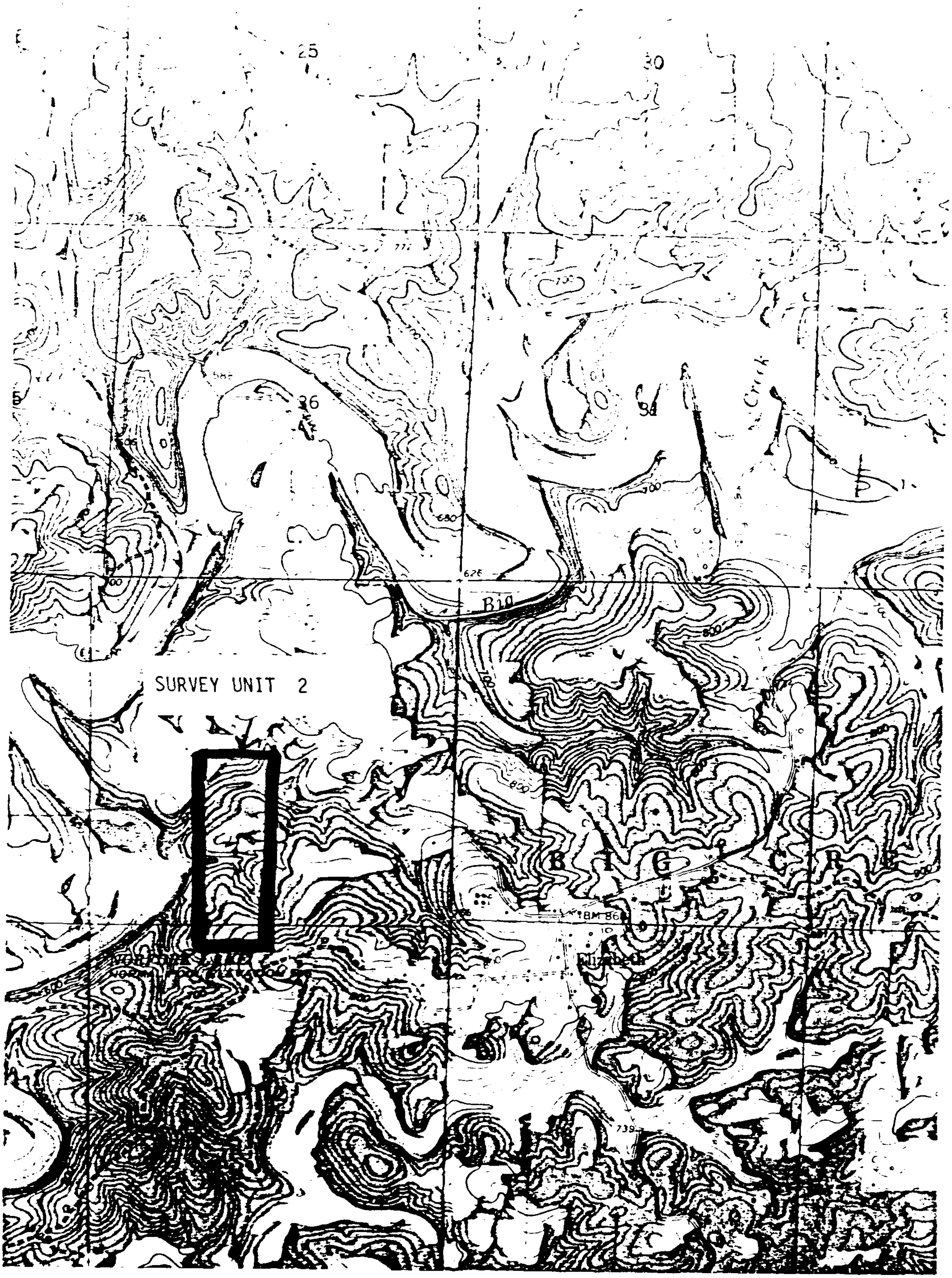
General Visibility: poor to fair due to differential ground cover and impacts.

Special Hinderances to Site Location: road construction and usage, ground cover, and severe erosion of backslopes.

Special Observations: heavy site density in area probably due to water availability (spring), lithic resources and closeness to Big Creek. Access to unit has improved since 1966. A small dirt road follows eastern boundary of unit.

Survey Strategy: parallel transects with 50 meters between surveyors. Shovel test interval of 50 meters when possible. Transects oriented north and south.

Surveyor(s): Lee, Jarecke and Northrip Date: 6/4/86


25
30
36
Creek
Big
SURVEY UNIT 2
B I G
BM 86
Elizabeth
739

Survey Unit: 3 (Parcel 5)

Quad Sheet: Gamaliel, ARK-MO., 1965, 7.5'

Terrain: is undulating to steeply sloping. Slope trends southeast to northwest. Landscape has been modified by land clearing and residential development.

Vegetation: mainly pasture land with vegetation relegated to fence lines. Oak, Elm, Cedar, Sweetgum, Black Locus observed.

Soil Description(s): 0-4cm, root zone; 4-9cm, silt loam w/gravel; 9-15cm, yellow red clay with gravel.

Sites Recorded: 3BA152

Isolated Finds: 0

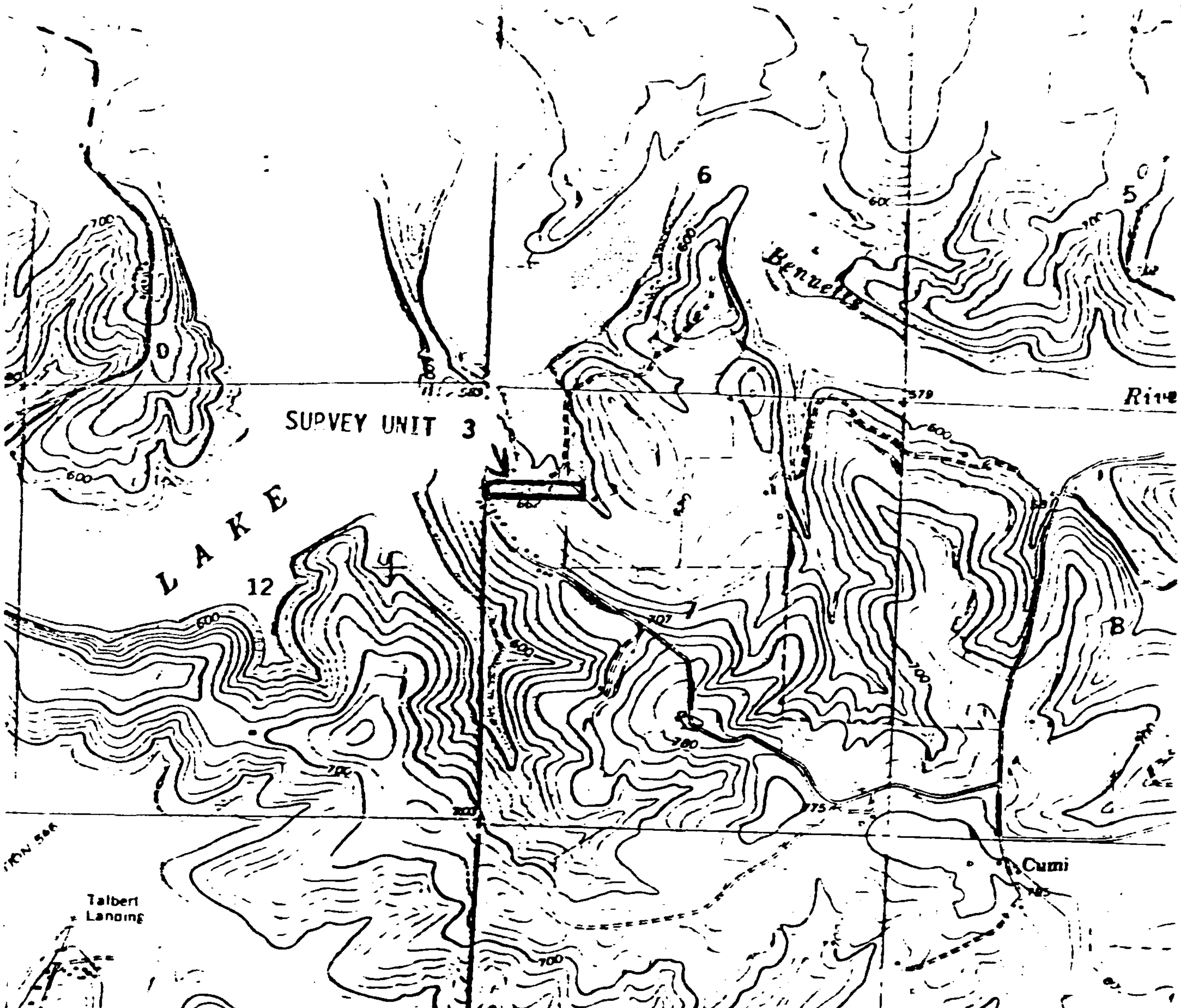
General Visibility: fair to good due to grass cover and exposed areas in survey unit.

Special Hinderances to Site Location: land clearing, slope erosion, road construction and usage and residential development.

Special Observations: unit has had additional roads and residences established since 1965. Pasture land is subject to erosion due to increasing slope and cattle herding.

Survey Strategy: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters. Transect oriented east to west.

Surveyor(s): Lee, Northrip and Jarecke Date: 6/5/86


SURVEY UNIT 3
LAKE
MILL
Bennetts
River
Talbert Landing
Walker
Hollow
Cumi
12
13
18
17
24
19
20
6
5
8

Survey Unit: 4 (Parcel 6)

Quad Sheet: Gamaliel, ARK-MO., 1965, 7.5'

Terrain: consisted of crest and backslope of interfluvial projection south of Walker Hollow. Crest is relatively flat and contains part of large open area (glade). Bench of exposed bedrock observed on west side of unit oriented southeast to northwest.

Vegetation: mixed hardwood on slopes with cedar in glade area. Understory thick near drainage and consists of briars, vines, poison ivy and oak, and small trees.

Soil Description(s): 0-4cm, silt loam w/gravel; 4- , bedrock.

Sites Recorded: 3BA153

Isolated Finds: 0

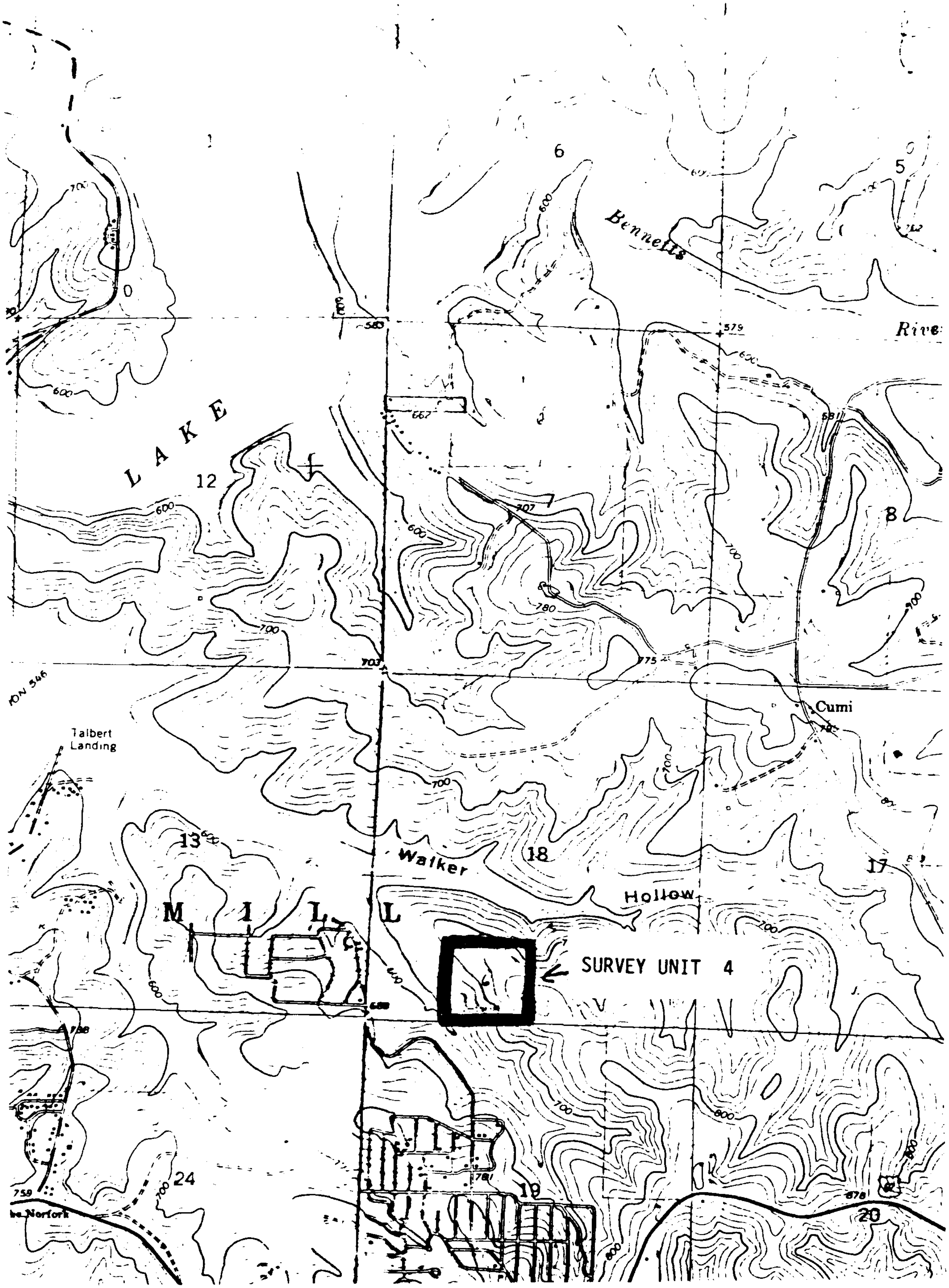
General Visibility: fair to excellent due to surface exposure in 75% of survey unit.

Special Hinderances to Site Location: severe slope erosion.

Special Observations: site 4-01 consists of 4 concentration areas with a large lithic scatter. Site function is lithic procurement and reduction. Access to survey unit is by foot, no road access. Large "glade" area covers approximately 40% of survey unit.

Survey Strategy: parallel transects with 50 meters between surveyors. Shovel test interval of 50 meters when possible. Transects oriented north and south.

Surveyor(s): Lee, Northrip and Jarecke Date: 6/5/86


Bennetts
River
LAKE
Talbert Landing
Walker Hollow
MILL
Cumi
Norfork
SURVEY UNIT 4
6
5
12
7
8
13
18
17
24
19
20

Survey Unit: 5 (Parcel 7)

Quad Sheet: Gamaliel, ARK-MO., 1965, 7.5'

Terrain: consists of crest, saddle, and backslopes of two interfluvial projections located north and west of Bennetts Bayou. Landscape ranges from level to extremely steep. Intermittent drainages carrying some water, but very low discharge.

Vegetation: Oak, Elm, Hickory, Dogwood, Black Locus, Cedar, and Pine upperstory. Poison ivy/oak, small trees, vines, and briar understory.

Soil Description(s): Soil Profile 1: 0-5cm, humus; 5-17cm, silt loam w/chert/gravel; 17-31cm, clay w/silt, gravel and chert. Soil Profile 2: 0-4cm, humus; 5-12cm, sandy loam w/gravel and chert; 12-23cm, silt w/sand, gravel and chert; 23-30cm, clay w/silt, gravel and chert. Soil Profile 3: 0-5cm, humus; 5-24cm, silt loam w/chert and gravel; 24-35cm, clay w/silt, gravel and chert. Soil Profile 4: 0-6cm, silt w/gravel and chert; 6- , bedrock.

Sites Recorded: 0

Isolated Finds: 0

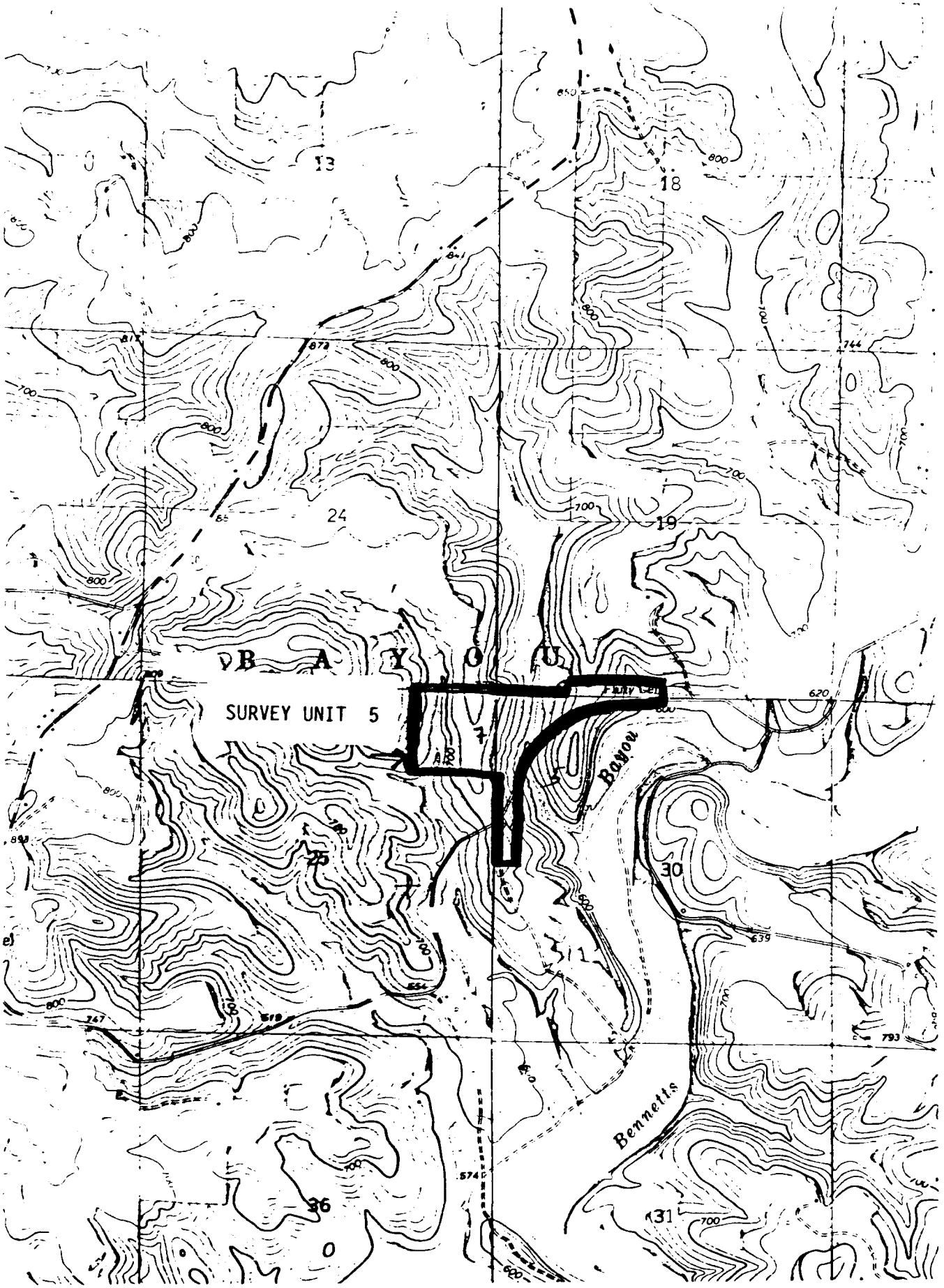
General Visibility: poor due to heavy ground cover. Some surface exposure on backslopes and areas close to drainages.

Special Hinderances to Site Location: heavy ground cover, slope erosion, road construction and usage.

Special Observations: road construction has severely impacted high probability site location areas (ie. saddles). Even though heavy rains in area, stream discharge is relatively low or non existent.

Survey Strategy: parallel transects with 50 meters between surveyors. Shovel test interval of 50 meters. Transects oriented north and south, east and west.

Surveyor(s): Lee, Northrip and Jarecke Date: 6/5-6/86


SURVEY UNIT 5
BAYOU
Bayou
Bennetts
13
18
24
19
25
30
36
31

Survey Unit: 6 (Parcel 8)

Quad Sheet: Udall, MO., 1968, 7.5'

Terrain: consisted of southern backslopes of two interfluvial projections and intermittent drainage floodplain. Topography is undulating to extremely steep on slopes.

Vegetation: Oak, Elm, Hickory, Pine, and Cedar upperstory. Understory density varies and consists of poison ivy/oak, shrubs, grass, vines, and briars.

Soil Description(s): Soil Profile 1: 0-5cm, humus; 5-14cm, silt loam w/gravel and chert; 14-22cm, clay loam w/gravel and chert. Soil Profile 2: 0-4cm, silt with gravel and chert; 4- , bedrock.

Sites Recorded: 23OZ114

Isolated Finds: 0

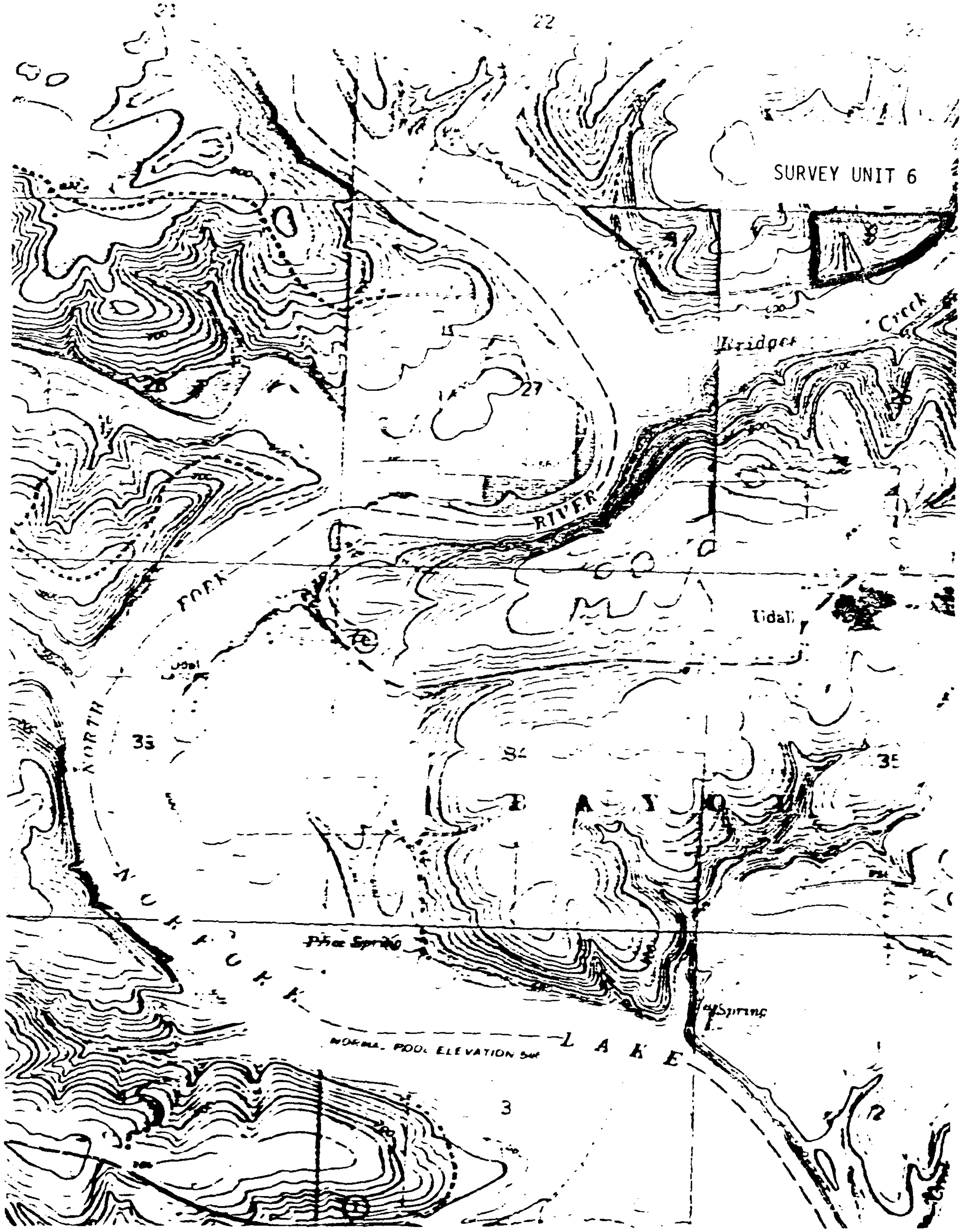
General Visibility: poor due to heavy ground cover in survey unit.

Special Hinderances to Site Location: heavy ground cover and slope erosion.

Special Observations: surface stone ubiquitous in survey unit. Area has been logged. Slopes show extensive erosion. Some residual soils remain in floodplain and in southwest portion of unit.

Survey Strategy: parallel transects with 50 meters between surveyors. Shovel test interval of 50 meters. Transects orientation is east and west.

Surveyor(s): Lee, Jarecke and Northrip Date: 6/6/86


SURVEY UNIT 6
22
27
28
Bridges
Creek
RIVER
FORK
NORTH
Udall
33
34
35
B A Y O
LAKE
NORMAL POOL ELEVATION
Spring
3

Survey Unit: 7 (Parcel 9)

Quad Sheet: Udall, MO., 1968, 7.5'

Terrain: consists of southern and western backslopes of an interfluvial projection. North of junction of Bridges Creek and Norfork River. Topography is undulating to extremely steep and eroded.

Vegetation: consists of mixed hardwood and Cedar/Pine upperstory. Understory density varies and consists of poison oak/ivy, grass, shrubs, vines, and briars.

Soil Description(s): Soil Profile 1: 0-6cm, humus; 6-12cm, silt loam w/gravel and chert; 12-21cm, clay loam w/gravel and chert. Soil Profile 2: 0-5cm, silt with gravel and chert; 5- , bedrock.

Sites Recorded: 0

Isolated Finds: 0

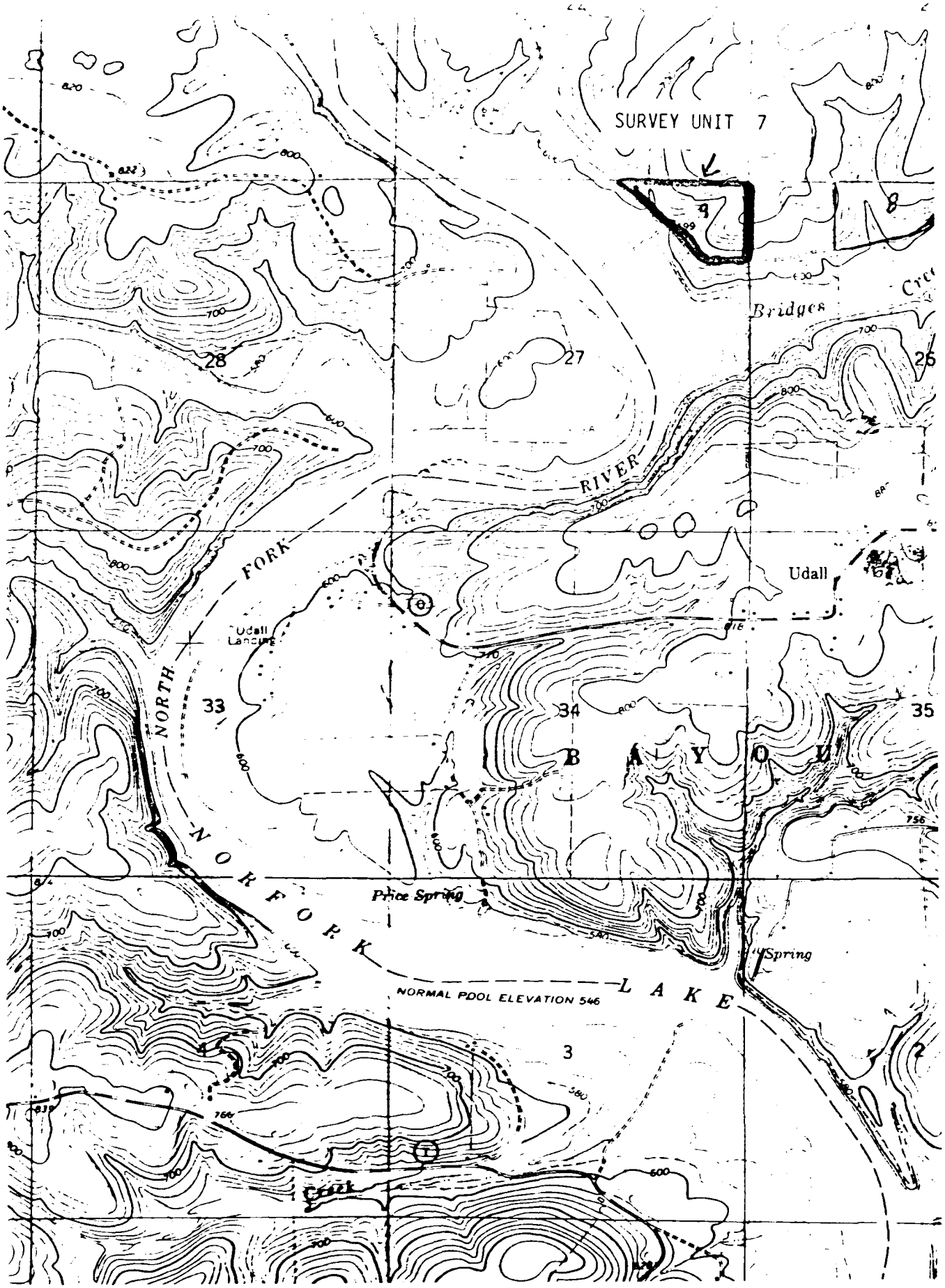
General Visibility: poor due to heavy ground cover in survey unit.

Special Hinderances to Site Location: heavy ground cover, slope erosion, and road construction.

Special Observations: severe slope erosion has stripped away most of soil on backslopes. Some soils remain in northwest portion of survey unit. Area has been logged.

Survey Strategy: parallel transects with 50 meters between surveyors. Shovel test interval of 50 meters. Transects oriented east and west.

Surveyor(s): Lee, Northrip and Jarecke Date: 6/6/86


SURVEY UNIT 7
9
8
Bridges
28
27
26
RIVER
FORK
NORTH
Udall
Udall Landing
33
34
35
B A Y O U
Price Spring
NORTH FORK
Spring
NORMAL POOL ELEVATION 546
L A K E
3
2
Cook

Survey Unit: 8 (Parcel 10)

Quad Sheet: Udall, MO., 1968, 7.5'

Terrain: consists of backslopes of two interfluvial projections of Bracher Ridge located north of the junction of Bryant creek and North Fork River. Topography is undulating to very steep. Several intermittent drainages dissect survey unit.

Vegetation: consists of Oak, Hickory, Pine, and Cedar upperstory with low density understory consisting of shrubs, grass, poison oak/ivy and briars.

Soil Description(s): Soil Profile 1: 0-4cm, humus; 4-13cm, silt w/gravel and chert; 13-19cm, clay with gravel and chert. Soil Profile 2: 0-7cm, silt with gravel and chert; 7-15cm, clay with gravel and chert; 15- , bedrock.

Sites Recorded: 0

Isolated Finds: 0

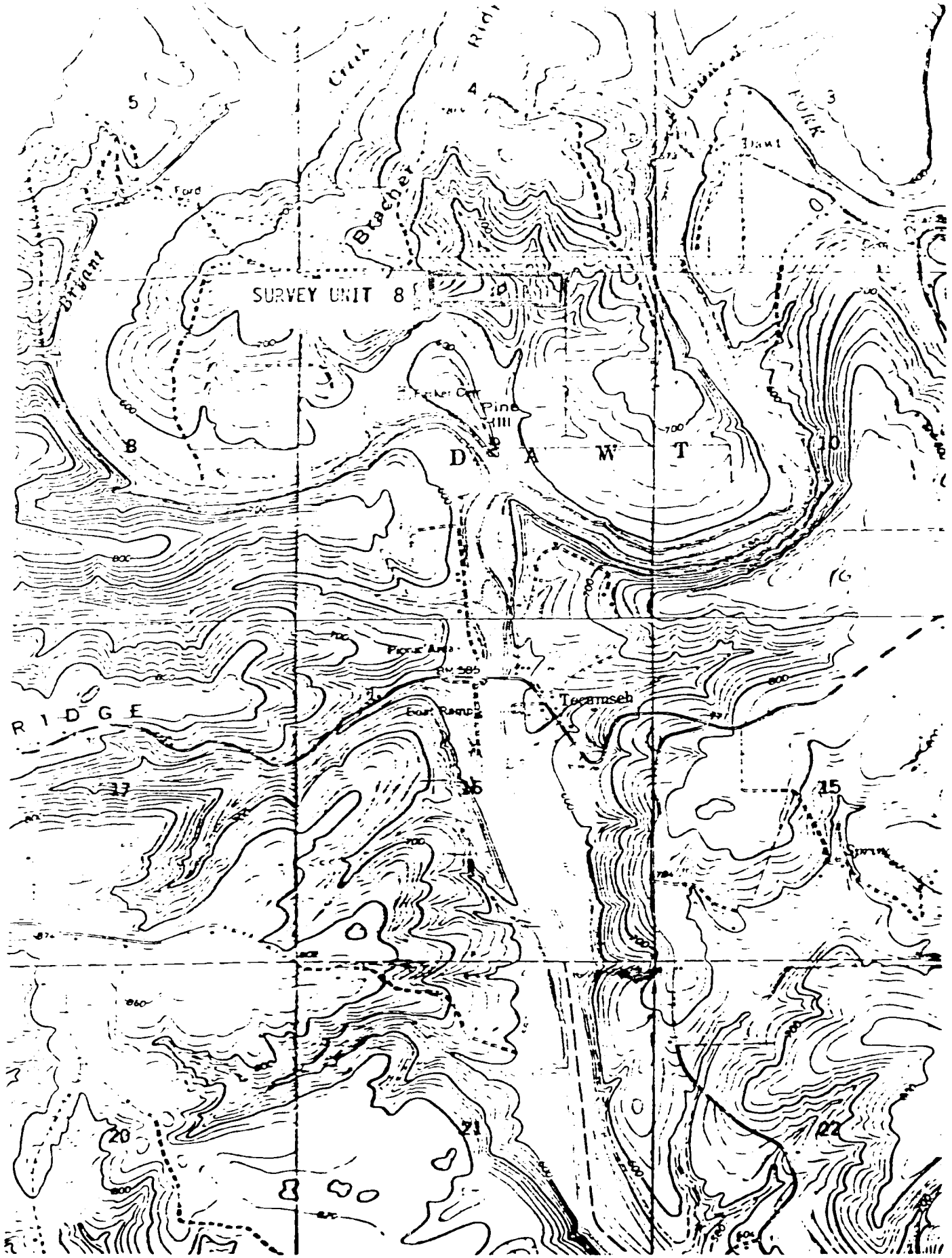
General Visibility: poor to good due to differential density of ground cover in survey unit.

Special Hinderances to Site Location: heavy ground cover in some areas and severe slope erosion.

Special Observations: no ground cover in many areas of survey unit which exposed areas ranging in size from 25m to 500m. Naturally eroded chert observed in these areas. Area usage primarily for cattle grazing.

Survey Strategy: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters. Transect orientation is east and west.

Surveyor(s): Lee, Northrip and Jarecke Date: 6/7/86


SURVEY UNIT 8
Pine
Tecumseh
RIDGE

APPENDIX II

SITE SUMMARIES
AND
ARTIFACT DESCRIPTIONS

Definitions for Artifact and Flake Descriptions

bipolar: possible use of the bipolar technique (that is, direct percussion with anvil support of the objective piece) is inferred when a flake has a flat bulb with strong compression rings and possibly a damaged edge opposite the platform. On an objective piece (including bifaces), battering or small flake scars opposite a platform could be inferred to indicate anvil support.

"bending" fracture: discussed by Galm (1978:201) as "fracture in bending", this kind of break is recognized by a rolled, concave, or lipped appearance in cross section. It can occur during tool production when loading is uneven and the objective piece is not well enough supported; it often occurs during pressure flaking. It is inferred that "fracture in bending" could occur during tool use involving static loading, e.g., cutting, whittling, scraping, etc.

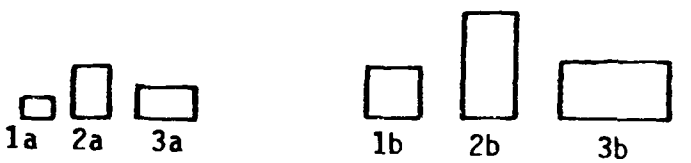
Thinning flake: has strong dorsal ridges with flake scars from more than one direction; thinning flakes with facetted platforms may be interpreted as biface thinning flakes.

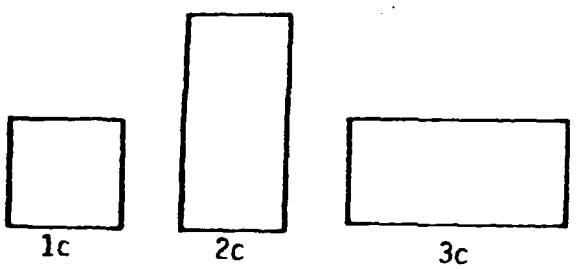
Platform preparation: recognized by the presence of flake scars on the platform or on a dorsal ridge resulting in a poor platform angle for further flaking (too obtuse; possibly too acute?). It is inferred that the piece was turned and flaked to remove this platform edge and create a fresh platform.

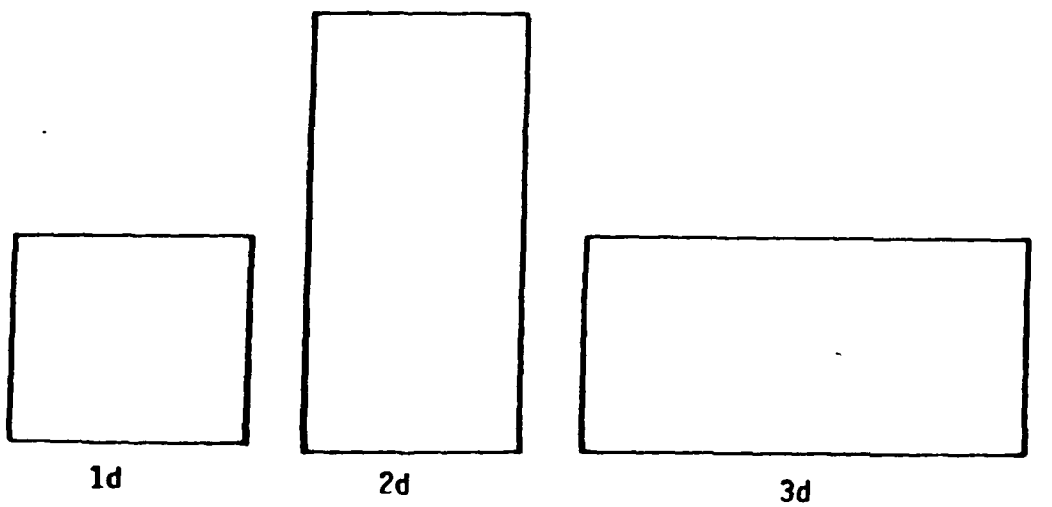
Edge modification: tiny flakes have been removed along the margin(s) of a flake or objective piece, or a piece with no other evidence of use. This damage is inferred to result from use, although some are probably post-depositional damage. Specific functions (cutting, scraping, chopping, etc.) usually are not identified at this level of analysis, unless inferable from the form of the tool (e.g., scraping edge is high angled and usually shows scalar damage and/or rounding; graver would be pointed but strong, may have damage similar to scraper).

List of Abbreviations
and
Flake Size Chart

a = absent
Cotter = Cotter chert
drp = dorsal ridge was a previous platform
dsb = dorsal surface exhibits battering
hf = heat fractured
ht = heat treated
mod = modified, with small flake scars in series along margin
Mrs = Reeds Spring chert
p = present
pc = present, cortex
pf = present, facetted
pq = present, quarry
ps = present, stream-rolled
pu = present, unidentified
pw = present, worn
Qtz = Quartzite
tool = well formed flake tools for which flake characteristics can be recorded; these are described under "artifacts" and are included in artifact totals
unid = unidentified







Flakes measured with platforms at the top

STATE NUMBER = 3FU039

QUAD SHEET: Norfork Lake Dam north
SITE TYPE: Surface Scatter
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
REMARKS:

LANDFORM:
EXTENT: 1000 - 4999m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Major

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter?	a	a	Broken Langtry stemmed point; tiny flakes and edge rounding on finished point; blunt tip with high angle edge. Reworked into scraper?.
Cotter?	a	a	Broken alternately bevelled biface (eg. Meserve point or Harahey knife); edges, broken at both ends. Reused as scraper?.
unid	a	a	Unidentified broken biface tool.

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	unid	-	pc	pq	mod.
1	unid	-	pf	a	
1	unid	1d	p	a	outrepasse flake

STATE NUMBER = 3FU040

QUAD SHEET: Elizabeth
SITE TYPE: Surface Scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Other
REMARKS:

LANDFORM:
EXTENT: 1000 - 4999m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Major

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter	a	a	Biface edge fragment, broken during pressure flaking or tool use; use damage? on part of edge; "bending" fracture.
Cotter	a	p	Biface edge fragment; mostly unifacial damage on sinuous edge; also use damage or modification on broken (HF) edge. Used before and/or after break by HF.
Cotter	a	a	Biface fragment broken during manufacture?; thin cross-section; edge damage is uncertain because of coarse grain of material; lateral snap break?.
Mrs?	a	a	Biface scraper, knife?; edge damage and rounding on parts of edge; steep angle on part of edge.
Qtz?	a	a	Unidentified biface tool; irregular sinuous edge, rounding uncertain due to grain size; some edge scars look fresher than the interior scars.
unid	a	a	Broken dart point; Early Archaic?, resembles Meserve; thin x-section; transverse break; slight alternate bevel to stem edges; thinned from base; straight (not sinuous) edges on blade; possible use damage on blade edges; possible grinding or wear on small shoulders only.
unid	a	p	Dart point or knife tip; irregular edge except at tip where edge is damaged with tiny scars; slightly bevelled and slightly rounded; broken during use or used as graver or drill after breaking.

Material	Cortex	HF	Description
unid	a	a	Biface broken during production; steep unifacial damage on part of biface edge and on broken edges; reused as scraper.
unid	a	p	Dart point or knife, broken during use and intensively heat fractured; narrow, pointed outline; extensive damage (scars) on sinuous irregular edge.
unid	pq	p	Core, rejected due to uncontrolled fracture; flake scars from one partially flaked platform; steep unifacial retouch on broken edge; reused as scraper.
unid	pq	a	Biface blank, broken during production with attempt to rework after breaking; tabular, thin piece with steep flaking and possible damage on broken edge; possible use as scraper after breaking.

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	Cotter	-	a	a	
1	Cotter	-	a	a	HF, mod?
1	Cotter	-	a	a	HF, thinning
1	Cotter	-	a	a	HF,thinning
1	Cotter	-	a	a	mod, arrow pt. preform?
1	Cotter	-	a	a	mod. (scraper?)
1	Cotter	-	a	a	thinning
1	Cotter	-	a	a	thinning, arrow pt. pref?
2	Cotter	-	pf	a	thinning
1	Cotter	-	pf	pq	thinning
1	Cotter	-	pf,pw	a	HF, thinning
1	Cotter	-	pw	a	
1	Cotter	-	pw	a	thinning
1	Cotter	1c	p	a	mod?
1	Cotter	1c	pw	a	thinning
1	Cotter	2c	a	pq	
1	Cotter	3c	p	a	thinning
1	Cotter	3c	p	pq	HF, mod.
1	unid	-	a	a	
1	unid	-	a	a	HF
1	unid	-	a	a	HF, thinning
1	unid	-	a	a	mod (scraper ?)
2	unid	-	a	a	mod?
3	unid	-	a	a	thinning

3FU40

1	unid	-	a	a	thinning, HF
1	unid	-	a	pq	
1	unid	-	a	pu	bif.mo,re-mod.into scrap
1	unid	-	p	a	
1	unid	-	p	pq	HF
1	unid	-	pf	a	
1	unid	-	pf	a	
1	unid	-	pf	pq	
1	unid	-	pf,pw	a	HF
1	unid	-	pw	a	thinning, HF
1	unid	1c	pc	pq	
1	unid	1c	pw	a	scraper resharpening?
1	unid	1d	p	pq	
1	unid	1d	pf,pw	a	thinning
1	unid	2c	a	a	thinning, mod.
1	unid	2c	pf,pw	a	thinning
1	unid	2d	a	a	bipolar? DRP
1	unid	2d	p	pq	HF

STATE NUMBER = 3FU041

QUAD SHEET: Elizabeth
SITE TYPE: Surface Scatter
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Other
REMARKS:

LANDFORM:
EXTENT: 1000 - 4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter	a	p	Unidentified tool fragment; flake scars on one face; steep edge modification on a corner; reworked into scraper or graver.
Cotter	pq	p	Chunk with edge modification.
Cotter	a	p	Biface tip broken during use?; edge damage.
Cotter	a	a	Scraper?, graver?; flake scars and edge modification on steeply bevelled edge with irregular outline.
Mrs?	pq	p	Core?; flake scars; edge modification.
unid	a	a	Contracting stemmed point? (untyped) broken blade; irregular outline with possible use wear on at least part of margin; reworked bifacially.

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	Cotter	-	a	a	
1	Cotter	-	a	a	
1	Cotter	-	a	a	
1	Cotter	-	a	a	thinning
1	Cotter	-	a	pq	
1	Cotter	-	p	a	bipolar?
1	Cotter	-	p	a	thinning
1	Cotter?	-	pc	pq	
1	unid	-	a	a	
1	unid	-	a	a	
1	unid	-	a	a	HF, thinning
4	unid	-	a	a	thinning

FLAKES RECOVERED (cont'd)

1	unid	-	a	a	thinning, HF
1	unid	-	a	a	thinning, mod.
1	unid	-	a	pq	
1	unid	-	a	pq	thinning
1	unid	-	p	a	
1	unid	-	p	a	thinning, HF, mod.
1	unid	-	p	pq	
1	unid	-	pc	pq	mod.
1	unid	-	pc	ps	
1	unid	-	pf	a	mod.
1	unid	-	pf	a	mod. scr?,pltform prep fl
1	unid	-	pf,pw	a	resharpening flake?
1	unid	-	pw	a	resharpening
1	unid	1b	p	a	
1	unid	1c	p	pq	
1	unid	1d	pc	pq	
1	unid	2b	p	a	HF
1	unid	3b	p	a	
1	unid	3b	pf	a	biface thinning

STATE NUMBER = 3FU042

QUAD SHEET: Elizabeth
SITE TYPE: Unspecified
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
Other
LANDFORM:
EXTENT: 1000 - 4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

REMARKS:

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter	a	p	Broken, completed Gary Stemmed point; edge damage and rounding indicate use; tip missing; scalar damage and rounding on high angle, broken edge; deliberately formed point on broken edge?. Reused as scraper/graver.
Cotter	pq	p	Chunk with edge modification.
Cotter	pq	p	Chunk with edge modification.
Mrs?	pu	a	Broken tool preform (flake or split core) used after break?; edge modification.
Mrs?	a	p	Biface broken during production; rounded tip; thinning scars originate at margins; transverse break influenced by HF.
Mrs?	pq	p	Biface broken during production, HF after discard; transverse break prior to HF.
Qtz	a	p	Biface or large point tip broken during manufacture or use?; edge wear from use is undeterminable because of coarse grain of material.

3FU42

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	Cotter	-	a	a	
1	Cotter	-	a	a	thinning
1	Cotter	-	a	pq	
1	Cotter	-	pf,pw	a	HF (equals 17,19,23)
1	Cotter	1c	a	a	thinning
1	Cotter	2d	p	pq	
1	Qtz	-	a	a	
1	Qtz	1d	p	pq	
1	unid	-	a	a	thinning
1	unid	1c	p	a	
1	unid	1c	p	pq	
1	unid	1d	a	pq	thinning
1	unid	1d	p	a	mod.
1	unid	1d	p	pq	thinning flake
1	unid	2d	pf,pw	a	biface thinning

STATE NUMBER = 3FU043

QUAD SHEET: Elizabeth
SITE TYPE: Surface Scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
Other

LANDFORM:
EXTENT: 1000 - 4999m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Major

REMARKS:

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter	pq	p	Tool or core?; flake scars; failed due to internal HF during flaking.
Mrs?	a	p	Biface end broken during use, HF after break; transverse break; edge damage and rounded edge.
unid	pq	*a*	*Core, bipolar?; flake scars over most of surface; last series are all from one unprepared platform with some edge damage on opposite end; most scars originate at opposite ends.*

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	Cotter	-	a	a	
1	Cotter	-	pc	pq	HF, mod. (scraper?)
1	Cotter	lc	a	a	
1	unid	-	a	a	HF
1	unid	-	a	a	thinning
1	unid	-	p	pq	mod (scraper?)
1	unid	-	pf,pw	a	bifacial scraper resharp

STATE NUMBER = 3BA152

QUAD SHEET: Gamaliel
SITE TYPE: Surface Scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
Other

LANDFORM:
EXTENT: 1000 - 4999m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Major

REMARKS:

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter	a	a	Knife or dart point tip broken during use; thin x-section; edge damage on both margins from tip to 2.5 cm away from tip; transverse break.
Cotter	pu	p	Biface, HF after discard.

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	Cotter	-	a	a	mod., thinning
1	Cotter	-	a	a	thinning
1	Cotter	-	p	a	
1	Cotter	-	p	a	thinning
1	Cotter	2d	p	pq	bipolar?
1	Cotter	2d	pf,pw	a	mod.
1	unid	-	a	a	HF
1	unid	-	a	a	thinning, HF
1	unid	1c	pf,pw	a	

STATE NUMBER = 3BA153

QUAD SHEET: Gamaliel
SITE TYPE: Surface Scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Other
REMARKS:

LANDFORM:
EXTENT: >10,000m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter	pq	p	Chunk with edge modification.
Cotter	a	p	Chunk with edge modificat'n.
Cotter?	pq	a	Bifacial core or biface tool preform; rejected because of outrepasse?
Mrs?	pq	a	Hammer, core?, scraper?; battering, flake scars; edge modification.
unid	pq	p	Chunk with edge modification.
unid	pq	a	Biface tip, broken during manufacture; heavy unifacial modification and wear along 2 parts of edge. Scraper use after breakage.

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	Cotter	-	a	a	mod, thinning
1	Cotter	-	p	a	mod, thinning
1	Cotter	1d	a	pq	mod*
1	Cotter	1d	p	pq	
1	Cotter	1d	pc	pq	
1	Cotter	1d	pc	pq	mod into scraper
1	Cotter	2d	p	a	mod
1	Cotter	2d	pf,pc	pq	
1	unid	-	a	a	
1	unid	-	p	pq	mod.?
1	unid	1d	a	a	thinning, mod
1	unid	1d	p	a	mod,drp,plat. prep flake?
1	unid	1d	p	pq	

FLAKES RECOVERED (cont'd)

38A153

1	unid	1d	p	pq	mod*
1	unid	2c	a	pq	thinning
1	unid	2d	a	a	mod*
1	unid	2d	a	pq	mod*
1	unid	2d	pf	a	mod, thinning
1	unid	2d	pf,pw	a	scraper resharpening
1	unid	3c	pf,pw	pq	scraper resharpening
1	unid	3d	a	pq	mod. including point
1	unid	3d	pf	a	thinning

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* removal of platform by small flakes on dorsal and ventral faces

STATE NUMBER = 23OZ114

QUAD SHEET: Udall
SITE TYPE: Surface Scatter
CULTURAL AFFILIATION: Archaic
Historic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
Other
REMARKS:

LANDFORM:
EXTENT: 5000 - 9999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

ARTIFACTS RECOVERED

Material	Cortex	HF	Description
Cotter	a	a	Broken large point, Steuben Expanding Stemmed; impact fracture?

HISTORIC ARTIFACTS RECOVERED

Number	Description
2	whiteware rim sherds of cup or bowl
1	clear round base glass fragment
1	clear rim and shoulder glass fragment
2	complete wire nails, 4 inches long
1	broken wire nail, 3 inches long